Amendments to the Claims:

1. (Cancelled)

2. (Currently Amended) A method of determining a property of a substance, the method comprising the steps of:

performing an optical detection step for determining a position of a volume of interest by means of an objective,

moving the objective such that a focal point of the objective is positioned in the volume of interest,

performing ~~an~~ optical spectroscopic ~~step for determining~~ analysis to spectroscopically determine the property of the substance in the volume of interest by means of a measurement beam,

wherein a coverage of the measurement beam is greater than the objective opening, and

wherein the objective is moved relative to the measurement beam in a direction perpendicular to the measurement beam while the objective opening remains within the coverage of the measurement beam.

3. (Previously Presented) The method of claim 2, wherein the substance is a fluid flowing through a biological tubular structure, and further comprising the steps of:

tracking a movement of the biological tubular structure by repetitively performing the optical detection step,

moving the objective such that the focal point remains in the volume of interest.

4. (Previously Presented) The method of claim 2, wherein the optical detection step is performed by means of an imaging method.

5. (Currently Amended) The method of claim 2, wherein the spectroscopic analysis includes one of Raman spectroscopy, fluorescence

spectroscopy, elastic scattering spectroscopy, infrared spectroscopy, or photo-acoustic spectroscopy is used for performing the optical spectroscopic step.

6. (Previously Presented) The method of claim 2, wherein the substance is blood and the volume of interest is located in a blood vessel.

7. (Previously Presented) A computer program product comprising program means for performing the steps of claim 2.

8. (Original) The computer program product of claim 7, the program means being adapted to control a second reflective optical element in order to direct the measurement beam from the second reflective optical element onto a first reflective optical element, such that the first reflective optical element directs the measurement beam to the objective opening, the measurement beam having a direction perpendicular to the optical axis of the objective when it impinges upon the first reflective optical element.

9. (Currently Amended) A spectroscopic system for determining a property of a substance comprising:

an imaging system which monitors a position of a volume of interest,

an objective having a focal point for performing an optical detection,

a spectroscopic system including:

a laser which provides a stationary, incident measurement laser beam that is larger than and encompasses the volume of interest and the objective, and

a spectrometer which spectroscopically analyzes laser light returned from the volume of interest via the objective;

an actuator which moves the objective and the focal point transversely relative to the stationary incident measurement laser beam[[,]];

a controller responsive to the imaging system to control the actuator to move the objective such that the focal point is maintained positioned in the volume of interest[[,]]

~~optical spectroscopic means for determining the property of the substance in the volume of interest, the optical spectroscopic means being adapted to provide a measurement beam~~.

10. (Currently Amended) The spectroscopic system of claim 9, wherein the ~~the~~ actuator includes mechanical, electro mechanical and/or piezo-electric components.

11. (Cancelled)

12. (Cancelled)

13. (Currently Amended) The spectroscopic system of claim [[12]]9, further comprising a first reflective optical element to direct the ~~measurement~~ stationary incident laser beam to and around the objective opening, the measurement beam having a direction perpendicular to the optical axis of the objective.

14. (Currently Amended) The spectroscopic system of claim 13, further comprising a second reflective optical element to direct the ~~measurement~~ incident measurement laser beam to the first reflective optical element, the second reflective optical element being mounted rotatably.

15. (Cancelled)

16. (Previously Presented) A method of providing an in vivo analysis of blood comprising:

using an imaging system to locate an objective relative to a blood vessel;

moving the objective such that a focal point of the objective is aligned with the blood vessel;

forming a feedback loop such that the position of the objective is compared to the position of the blood vessel after movement of the objective and the objective is moved again until the focal point aligns with the blood vessel;

using a spectroscopic system to direct a laser light beam through the objective and onto the blood vessel; and

using return light to perform a spectroscopic analysis of the blood in the blood vessel.

17. (Currently Amended) The method of claim [[1]]2, wherein the measurement beam remains stationary and the objective moves relative to the measurement beam such that when the volume of interest moves, the focal spot tracks the volume of interest.

18. (Previously Presented) A computer program product carrying a computer program for controlling a spectroscopic system to perform the method of claim 16.

19. (Currently Amended) An apparatus for providing *in vivo* analysis of blood, the apparatus comprising:

an objective having a focal point;

an imaging system that determines a current position of the objective relative to a target blood vessel;

a feedback loop which compares the current position of the objective focal point relative to the target blood vessel and moves the objective until the focal point coincides with the target blood vessel;

a laser that directs laser light through the objective to the focal point; and

a spectrometer which analyzes light ~~retained~~ returned through the objective to determine one or more properties of blood in the target blood vessel.

20. (New) The method of claim 16, wherein the laser light beam of the spectroscopic system is stationary and larger in cross section than the objective and the volume of interest and wherein moving the objective includes moving the objective relative to the stationary laser light beam.

21. (New) The apparatus of claim 19, wherein the feed back loop moves the object transversely relative to the laser light beam.

22. (New) The apparatus of claim 21, wherein the laser directs a stationary laser light beam that is larger than the objective through and around the objective.